

ABSTRACT OF THE DISCLOSURE

The invention relates to a thermally, and optionally catalytically, operative exhaust gas treatment reactor of an engine, comprising filamentary material, directly against and inside the heat insulating portion of a housing assembly which is placed on an engine over the exhaust ports, either directly or with a member interposed. Rapid warm up during cold start is achieved by restriction of gas flow, with the optional re-routing of exhaust gas, including routing to a reservoir which may be expansible. Other features include various embodiments of filamentary material mechanisms for accurately regulating exhaust gas recirculation and provision of extra air, providing a secondary substance such as water/methanol or steam to induction charge to assist in the balancing of exhaust reactions, alternative fuel delivery devices. Treatment of exhaust gas is generally but not specifically to remove certain undesired pollutants from the exhaust gas of vehicles as required in many countries.